



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER OF PATENTS AND TRADEMARKS
Washington, D.C. 20231
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/398,307	09/20/1999	SHAWN W. HOGBERG	IR103778	9914

7590 04/25/2002

VINCENT B INGRASSIA
MOTOROLA INC INTELLECTUAL PROPERTY DEPT
SUITE R3108
P O BOX 10219
SCOTTSDALE, AZ 852710219

EXAMINER

RAMOS FELICIANO, ELISEO

ART UNIT PAPER NUMBER

2682

DATE MAILED: 04/25/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.
09/398,307

Applicant(s)
HOGBERG et al.

Examiner
Eliseo Ramos-Feliciano

Art Unit
2682



-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136 (a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on _____
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 35 C.D. 11; 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-27 is/are pending in the application.
- 4a) Of the above, claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-27 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claims _____ are subject to restriction and/or election requirements.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are objected to by the Examiner.
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. § 119

- 13) ☐ Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d).
- a) ☐ All b) ☐ Some* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- *See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).

Attachment(s)

- 15) ☒ Notice of References Cited (PTO-892) 18) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 16) ☒ Notice of Draftsperson's Patent Drawing Review (PTO-948) 19) ☐ Notice of Informal Patent Application (PTO-152)
- 17) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s). _____ 20) ☐ Other: _____

Art Unit: 2682

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless --

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. **Claims 1-27** are rejected under 35 U.S.C. 102(b) as being anticipated by Natarajan et al. (U.S. Patent Number 5,749,044).

Regarding **claims 1, 4-5, 7, 10-14, 16-18, 21, and 26-27**, Natarajan et al. discloses a system and a method for managing and allocating channels in a wireless communication system, see title and abstract. The bandwidth is divided (segmented) in groups of channels named "pool of channels" (sub-band), wherein each "pool" (sub-band) is assigned to a different cell, see Figure 3, step 110, column 1, lines 14-37, and column 6, lines 23-25. Channels are allocated to each one of the cells based on a transmitting power (transmit power level) of a cell, see column 7, lines 46-59. The received power (power level of a received signal) is evaluated (measured) for the purpose of allocating the channels, *inter alia*, see column 6, lines 1-5. The channels could be FDMA, TDMA, CDMA or a combination (at least two different multiple access methods as claimed) thereof, see column 3, lines 10-17.

Natarajan et al. further discloses that the wireless communication system includes a satellite communication system (10) with satellites (20) ground stations (40) and subscribers (30),

Art Unit: 2682

see Figure 1, and column 2, lines 4-67. The satellites orbit around a primary body and a constellation of satellites form footprint regions as claimed.

Since Natarajan et al. teaches that the allocation of channels is dynamic, it is understood that it includes means for assigning new channels as claimed in the basis of a change in the power condition, see title, column 1, lines 6-11, *inter alia*.

Regarding **claims 2-3, 8-9, 15, and 22-25**, Natarajan et al. discloses everything claimed as applied above (see rejection of *claims 1, 7, 14, and 21*). As explained above, Natarajan et al. teaches that the channels could be FDMA, TDMA, CDMA or a combination thereof, see column 3, lines 10-17. Therefore, at least two different multiple access methods as claimed are taught and implemented by Natarajan et al. For example, a first pool of channels (first sub-band) can include FDMA, TDMA, and/or CDMA channels as claimed, see column 3, line 18 to column 4, lines 28, and Figure 2.

Regarding **claims 6, and 19-20**, Natarajan et al. discloses everything claimed as applied above (see rejection of *claims 1, 7, 14, and 21*). As explained above, Natarajan et al. teaches that the wireless communication system 10 is a “space-based mobile telecommunication system” and includes a satellite communication system (10) with satellites (20) ground stations (40) and subscribers (30), see Figure 1, abstract, and column 2, lines 4-67. Satellite 20 could be geostationary, low-earth orbit, medium earth orbit and/or a combination thereof. It may also include a “constellation”; i.e. a number of satellites arranged in orbits for providing specified coverage of a portion, portions or all of earth (footprint regions). Hence, the satellites orbit

Art Unit: 2682

around a primary body (e.g. the earth) and a constellation or group of satellites form footprint regions as claimed, as taught at column 2, lines 4-13 & 31-43.

Citation of Pertinent Prior Art

3. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure:

Bergamo (U.S. Patent Number 6,104,708) see Figure 1, column 1, lines 44-63.

Uchida et al. (U.S. Patent Number 6,160,801) see column 20, lines 39-57.

Wiedeman et al. (U.S. Patent Number 6,272,325) see Figure 1, and abstract.

Conclusion

4. Any response to this Office action should be mailed to:

Commissioner of Patents and Trademarks
Washington, D.C. 20231

or faxed to:

(703) 872-9314

for formal communications intended for entry, informal communications or draft communications; in the case of informal or draft communications, please label "PROPOSED" or "DRAFT".

Hand-delivered responses should be brought to

Crystal Park II
2121 Crystal Drive
Arlington, VA
Sixth Floor (Receptionist).

5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Eliseo Ramos-Feliciano whose telephone number is (703) 305-0078. The examiner can normally be reached on Monday through Thursday (first week of bi-week) and Monday through Friday (second week of bi-week) from 8:30 a.m. to 6:00 p.m..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Vivian Chin, can be reached on (703) 308-6739. The fax phone number for this Group is (703) 872-9314.


Application/Control Number: 09/398,307

Page 5

Art Unit: 2682

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Group receptionist whose telephone number is (703) 305-4700, or call Group customer service at (703) 306-0377.

ERF/erf
April 19, 2002.


4/22/02

NGUYENT.VO
PRIMARY EXAMINER